

## WHAT IS CLAIMED IS:

1. A three-dimensional CAD system which comprises allotting shape data indicating the shape of a part to each component, allotting reference data indicating a reference relation to between components, reproducing a three-dimensional model on a screen by sequentially stacking parts to be stacked on the already stacked parts based on the shape data and the reference data, processing to delete or modify parts of the three-dimensional model on the screen, reproducing the three-dimensional model with its part deleted or modified, and if reproduction of the three-dimensional model is stopped at a certain part, searching for the cause of non-reproducibility, wherein:

the three-dimensional model immediately before the part is deleted or modified is stored;

the stored immediately preceding three-dimensional model is shown on the same screen together with the non-reproducible three-dimensional model whose reproduction was stopped at the certain part; and

a difference of the shape and reference data between both of the three-dimensional models is determined to extract shape and reference data which are missing from the non-reproducible part, and the extracted shape and reference data are converted into information indicating the cause of non-reproducibility and shown on the screen.

2. The three-dimensional CAD system according to claim 1, wherein the non-reproducible part is shown at the pertinent position on the non-reproducible three-dimensional model on the screen.

3. The three-dimensional CAD system according to claim 1, wherein a modification plan to reproduce the three-dimensional model having the part deleted or modified is shown on the screen.